

REMARKS

Applicants thank the Examiner for the detailed Office Action dated December 12, 2005. Applicants respectfully request reconsideration of the present application in view of the reasons that follow.

Claims 19-29 and 42-56 were pending in the application. Claims 23, 25, 27, and 56 are requested to be cancelled without prejudice or disclaimer. Claims 19, 22, 24, 28, 44, and 49-55 are currently being amended. Claims 57-75 are being added. After amending the claims as set forth above, claims 19-22, 24, 26, 28-29, 42-55, and 57-75 are now pending in this application.

For simplicity and clarity purposes in responding to the Office Action, Applicants' remarks are primarily focused on the rejections to the independent claims outlined in the Office Action with the understanding that the dependent claims that depend from the independent claims are patentable for at least the same reasons (and in most cases other reasons) that the independent claims are patentable. Applicants expressly reserve the right to argue the patentability of the dependent claims separately in any future proceedings.

Claim Rejections – 35 U.S.C. § 103(a)***Law of Obviousness***

35 U.S.C. § 103(a), the statutory basis for obviousness rejections, states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The legal standards under 35 U.S.C. § 103(a) are well-settled. Obviousness under 35 U.S.C. § 103(a) involves four factual inquiries: 1) the scope and content of the prior art; 2) the differences between the claims and the prior art; 3) the level of ordinary skill in the pertinent art;

and 4) secondary considerations, if any, of nonobviousness. See Graham v. John Deere Co., 383 U.S. 1 (1966).

The PTO acknowledges the standard that in order to establish a prima facie case of obviousness, the following criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the cited references must teach or suggest all the claim limitations. (See MPEP § 2143.) Furthermore, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. (See MPEP § 2141.02.)

In proceedings before the Patent and Trademark Office, the Patent Office bears the burden of establishing a prima facie case of obviousness based upon the prior art. In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). “[The Patent Office] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Further, satisfying this burden requires the Patent Office to make “particular findings . . . as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.” In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). In making these findings, the Patent Office must consider each prior art reference in its entirety, including portions that would lead away from the claimed invention. W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1552, 220 USPQ 303, 312 (Fed. Cir. 1983). When a reference teaches away from the claimed invention, that teaching is strong evidence of non-obviousness. See U.S. v. Adams, 383 U.S. 39, 148 U.S.P.Q. 79 (1966); In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Furthermore, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)

The Federal Circuit has further cautioned that:

Most if not all inventions arise from a combination of old elements. Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.

In re Kotzab, 217 F.3d 1365, 1369-70, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000) (citations omitted). “Close adherence to this methodology is especially important in cases where the very case with which the invention can be understood may prompt one ‘to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.’” Kotzab, 217 F.3d at 1369, 55 USPQ2d at 1316 (quoting W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983)).

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 682, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990). “It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to ‘[use] that which the inventor taught against its teacher.’” In re Lee 277 F.3d at 1344, 61 USPQ2d at 1434 (quoting W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983)).

Independent Claims 19 and 24

On page 2 of the Office Action, independent claims 19 and 24 and various dependent claims were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,742,344 (Vornedal) in view of Japanese reference No. 2000-175781 (Masakazu et al.). Applicants respectfully traverse the rejection. None of the cited references, alone or in combination, disclose, teach, or suggest the subject matter recited in independent claims 19 and 24 as amended.

Applicants respectfully submit that there is no motivation, teaching, or suggestion to combine the references in the manner asserted in the Office Action. When Vormedal is considered as a whole (see MPEP § 2141.02, which explains that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention) it becomes clear that converting the system of Vormedal to a “heated chamber with humidity control” - as asserted in the Office Action - eliminates almost all of the advantages of the complex dual duct system shown in Vormedal. Thus, the user is left with a complex duct system without enjoying the advantages that would make one want to use such a complex duct system.

A review of Vormedal shows the many advantages that would be eliminated should the system be adapted to a “heated chamber with humidity control.” For example, Vormedal explains that the “**main problem**” of refrigerating goods with “shelved cupboards” is **defrosting the cooling elements without “causing undesirable warming of the refrigerated goods.”** Vormedal, col. 1, line 50 to col. 2, line 17. Vormedal explains that the advantage of using the dual “ducting arrangement is that the refrigerated goods will not be exposed to warm air through the nozzles in the shelf/shelves during defrosting.” Vormedal, col. 3, lines 11-13. Furthermore, Vormedal explains that the ducting arrangement also allows for a “shorter defrosting time due to the increased circulation rate in the ducting system.” Vormedal, col. 3, lines 25-26. Applicants respectfully submit that the Patent Office has ignored these contrary teachings in Vormedal which would lead one of ordinary skill away from converting Vormedal to a “heated chamber with humidity control.” One of ordinary skill would not be motivated to make such a complex system knowing that the most of the advantages of such a system in a cooling context will not be realized in a heating context.

To the extent the Patent Office disagrees with Applicants’ arguments, the Patent Office is required to make particular findings regarding why the skilled artisan having no knowledge of the claimed invention and in view of the contrary teachings of Vormedal would have combined the teachings of Masakazu et al. in the manner asserted in the Office Action to provide the subject matter of independent claims 19 and 24. See In re Kotzab, 217 F.3d 1365, 1371, 55

USPQ2d 1313, 1317 (Fed. Cir. 2000) (holding that the Patent Office must make “particular findings . . . as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.”).

Applicants further submit that the motivation asserted in the Office Action is also insufficient, when each reference is viewed as whole, to support a prima facie showing of obviousness. In the Office Action, the Patent Office asserted that the “advantage cited for the [Vormedal] container, the energy efficient use of air changed to a temperature different from ambient temperature, circulating in a food containing chamber, applies as well to heated as to cooled air.” Office Action, dated December 12, 2005, page 2. The Patent Office concludes that “[i]t would have been obvious to adapt the system of [Vormedal] to a heated chamber with humidity control, after the manner of [Masakazu et al.], where heated foods are displayed, since the advantages of the air duct system of [Vormedal] obtain as well for heating as cooling, and humidity control prevents the drying of displayed foods.” Id. Thus, it appears that the motivation asserted by the Patent Office for combining the two references is to provide more energy efficient use of the air.

Applicants respectfully submit that once again the Patent Office has failed to consider the references as a whole. For example, a review of Masakazu et al. shows that the food exhibition equipment described therein is already more energy efficient than the dual duct system shown in Vormedal. (Applicants note that Applicants are relying on the machine translation of Masakazu et al. provided in the last Office Action for an understanding of Masakazu et al.) For example, the food exhibition equipment in Masakazu et al. includes three heaters 13, 14, 23. The heater 13 is used to heat the shelf 6. Masakazu et al., paragraphs 35-36. The heater 14 is used to heat the air that is between the outer plate 3 and the inner plate 4. Masakazu et al., paragraph 39. The heater 23 is used to heat the air which passes through the duct 19. Masakazu et al., paragraph 43. Masakazu et al. also includes a fan 12 that blows air onto each shelf 6 and separate humidity inputs 16, 17 for the air that is blown onto the shelves 6 and the air that passes through the duct 19. Masakazu et al., paragraphs 38-40.

All of this combined allows the unit of Masakazu et al. to be very energy efficient. For example, if the unit only had food items on some of the shelves, it is possible to only heat those shelves. Furthermore, the air that is blown onto the shelves and the air that forms the air curtain in Masakazu et al. are separately heated and humidified making it possible to reduce energy usage even beyond that of Vormedal where the two air streams are not controlled independently. Also, the use of multiple fans 12 allows for localized heating in Masakazu et al. This makes it possible for a user to control the temperature of each shelf to further reduce energy usage.

Applicants respectfully submit that to the extent the Patent Office disagrees with Applicants' arguments, the Patent Office is required to make particular findings regarding why the skilled artisan, having no knowledge of the claimed invention, would have combined Vormedal and Masakazu et al. in the manner asserted in the Office Action to provide the subject matter of independent claims 19 and 24 when Masakazu et al. appears to be more energy efficient than Vormedal. See In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (holding that the Patent Office must make "particular findings . . . as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.").

Applicants further submit that with regard to independent claim 24, Vormedal in combination with Masakazu et al. would not result in the subject matter recited in independent claim 24, as amended, because neither reference discloses, teaches or suggests that "a majority of air received by the at least one air return in the first side comes from the air curtain." Rather, in Vormedal the majority of the air received the air return comes from the nozzle 7 in the shelves 12. Vormedal, Figures. Accordingly, independent claim 24 is also allowable in view of Vormedal and Masakazu et al.

Applicants respectfully submit that the subject matter recited in independent claims 19 and 24 and the claims which are dependent thereon, considered as a whole, would not have been obvious to a person of skill in the art and are patentable. Accordingly, Applicants request withdrawal of the rejection of the claims under 35 U.S.C. § 103(a).

New Claims

Applicants have added new claims 57-75, of which claims 57, 60, 63, 66, 69, and 73 are in independent form. With regard to all of the new independent claims, Applicants submit that these claims are allowable because none of the cited references show each combination of claimed features. For example, all of claims 57, 60, 63, 66, 69, and 73 recite a heating related limitation and a limitation related to air traveling adjacent to food items and between the air curtain and at least one opening in the duct system. Claims 57, 63, 66, 69, and 73 further recite a humidity related limitation. Therefore, the combination of Vormedal and Masakazu et al. cannot properly be used to reject these claims as explained above in connection with independent claims 19 and 24.

In addition to these limitations, various independent claims recite additional limitations that further distinguish the cited references. For example, claims 60 and 63 recite a “duct system configured to circulate an air stream in a single loop in the container” as opposed to the dual loop configuration shown in Vormedal. In addition, claim 66 recites that a “majority of the air that travels through the at least one opening in the duct system travels between the air curtain and the at least one opening in the duct system” as opposed to the configuration in Vormedal where most of the air that travels through the perforations 13 travels between the nozzles 7 and the perforations. Further, claim 69 recites that the “air stream passes over a water source which humidifies the air stream,” which is not shown in either Vormedal or Masakazu et al. Claim 73 recites that the “air stream is heated and humidified,” the “duct system [is] configured to direct at least a portion of the air stream across the opening to form an air curtain,” and the “air stream is the primary source of heat and humidity imparted to the food items” as opposed to Masakazu et al. where the air stream that forms the air curtain is not the primary source of heat and humidity imparted to the food items.

Accordingly, Applicants submit that all of the new claims are allowable over the cited references.

Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 46-48 and 53-55 contain allowable subject matter.

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Applicants respectfully submit that the present Application is in condition for allowance. Applicants request reconsideration and allowance of the pending claims.

The Examiner is invited to contact the undersigned by telephone if the Examiner needs anything or if a telephone interview would advance the prosecution of the present application.

Applicants respectfully put the Patent Office and all others on notice that all arguments, representations, and/or amendments contained herein are only applicable to the present patent application and should not be considered when evaluating any other patent or patent application including any patents or patent applications which claim priority to this patent application and/or any patents or patent applications to which priority is claimed by this patent application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1447.

Respectfully submitted,

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